Department of Conservation

MAINE LAND USE REGULATION COMMISSION

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Guidelines for Private Roads or Ways in the Land Use Regulation Commission's Management Districts

Chapter 15 of the Commission's Rules

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CHAPTER 15 GUIDELINES FOR PRIVATE ROADS OR WAYS IN THE LAND USE REGULATION COMMISSION'S MANAGEMENT DISTRICTS

SECTION 6 OF THE LAND USE HANBOOK

15.01 Introduction

The Land Use Regulation law (12 M.R.S.A. § 685-A(5)) provides that roads in management districts constructed and maintained in accordance with the guidelines of Section 6 of the Commission's Land Use Handbook, "Erosion Control on Logging Jobs," as originally published or subsequently revised, do not require a permit. Chapter 15 was adopted as a supplement to Section 6 of the Land Use Handbook and includes these guidelines, which have the following objectives:

- 1. To fulfill the Legislature's intent, expressed in 12 M.R.S.A. § 685-A(5), that roads in upland areas, including private roads, adhere to basic environmental standards;
- 2. To provide guidelines for the location and construction of certain roads in management districts, a type of activity which the original version of Section 6 of the Land Use Handbook was not designed to address directly;
- 3. To provide meaningful guidelines for such roads in a manner that is consistent with the spirit and intent of the law, Section 6 of the Handbook, and LURC regulations for roads in protection districts;
- 4. To maintain the integrity of Section 6 of the Handbook as an informal educational booklet designed for small logging operations by providing these guidelines as a supplement to the Handbook.

15.02 Applicability

These guidelines apply to construction of private roads and ways covering 3 or more acres in LURC management districts. Road construction that complies with these guidelines does not require a permit from the Commission, except as provided in the Commission's wetland rules in Chapter 10. Other roads are regulated according to Chapter 10, *Land Use Districts and Standards*, of the Commission's rules.

The following table may be used as a guide in determining whether a proposed road exceeds the three-acre threshold:

TABLE FOR DETERMINING WHEN A ROAD AFFECTS THREE OR MORE ACRES OF GROUND AREA		
Width of road	Length of road at which	
(includes only unvegetated portion of ROW)	three acres of area is affected	
(feet)	(miles)	
12	2.06	
16	1.55	
20	1.24	
24	1.03	
28	0.88	
32	0.77	
36	0.69	
40	0.62	

In calculating whether the three-acre threshold of the law has been exceeded:

- 1. The area of continuous road to be constructed, exclusive of banks, ditches, and portions of the right-of-way which are to be revegetated within two growing seasons from the time of construction, shall be included.
- 2. The area of roads constructed prior to January 5, 1981, shall not be included, unless otherwise specified.
- 3. The reconstruction of an existing road, including widening or straightening, shall be included.
- 4. Normal maintenance of an existing road, including gravel resurfacing, grading, reditching, reshaping, culvert maintenance and replacement, and the clearing of brush, shall not be included.

Once a continuous stretch of road exceeds the three-acre threshold, all portions of the road and additions to the road must comply with these standards in order to qualify for exemption from permitting.

Guidelines for Roads in Management Districts

15.03 Planning and Location (Refer to Handbook, Section 6)

- 1. The location of roads should be planned and laid out, both on paper and on the ground, before starting construction.
- 2. As a general rule, landowners should give advance consideration to avoiding areas where road location or increased public access are not desirable. In this regard, areas near water bodies and in wetlands, steep slopes, wildlife habitat, high mountain areas, areas of historical or cultural significance, and remote recreational areas should be avoided wherever possible.

- 3. Roads should be laid out so that the number of stream crossings is kept to the minimum practicable. In order to avoid excessive cuts and fills, the general contours of the land should be utilized to the fullest extent possible.
- 4. To facilitate the control of water and drainage of road surfaces, roads should also be laid out, whenever practical, to utilize southerly slopes and to follow contours of side slopes.
- 5. Road grades should be kept below ten percent except for short distances where the grade may exceed ten percent.

15.04 Construction Techniques (Refer to Handbook, Section 6)

- 1. During road construction, reasonable measures should be undertaken to control water runoff and erosion in order to avoid sedimentation of water bodies.
- 2. Drainage ditches should be provided whenever necessary to effectively control water entering and leaving the road area.
- 3. Cut and fill sections and road banks should be effectively stabilized so as to prevent erosion or slumping.
- 4. In order to prevent road surface drainage from directly entering water bodies, roads and their associated drainage ditches, should be located, constructed and maintained so as to leave an unscarified filter strip, of at least the width indicated in the following table, between the exposed mineral soil of the road and the normal high water mark of the surface waterbody or water course:

Average Slope of Land Between Exposed	Width of Strip Between Exposed
Mineral Soil and Normal High Water Mark	Mineral Soil and Normal High Water Mark
(Percent)	(Feet Along Surface of the Ground)
0	25

0	25	
10	45	
20	65	
30	85	
40	105	
50	125	
60	145	
70	165	

This guideline shall not apply to road approaches to water crossings.

5. Drainage ditches for roads approaching a water crossing should be designed, constructed, and maintained to empty into an unscarified filter strip, of at least the width indicated in the table set forth in Subsection 4 above, between the outflow point of the ditch and the normal high water mark of the waterbody. Where such filter strip is impracticable, other appropriate techniques should be used to reasonably avoid sedimentation of the waterbody. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed so as to reasonably avoid sedimentation of the waterbody.

6. Cross drainage culverts or drainage dips should be installed to get drainage water from the uphill side of the road to the downhill side before the flow in drainage ditches or roads gains sufficient volume or head to cause erosion and water sedimentation.

Drainage water on the downhill side of the road should be diverted from the road ditch into vegetated areas by installation of water turnouts spaced so as to prevent the flow in the ditch from gaining sufficient volume or head to cause erosion and water sedimentation.

Such water diversion structures should be located and constructed as follows:

- a. Drainage dips should be used in place of ditch relief culverts only where the road grade is 10 percent or less. Such dips should be constructed so that the road slope is reversed, the base of the dip drains to the outslope, and the surface of the dip is graveled.
- b. On roads having slopes greater than 10%, ditch relief culverts should be placed across the road at approximately a 30 degree angle downslope from a line perpendicular to the center line of the road.
- c. Culverts and drainage dips should also be installed so as to direct drainage water onto an unscarified filter strip.
- d. Inlet end of culverts should extend into side ditches to intercept ditch flows and should be adequately stabilized by riprap or other suitable means to reasonably avoid erosion of material around the culvert.
- e. Culverts, drainage dips, and water turnouts should be spaced along the road at intervals which are sufficient to prevent the water flow in drainage ditches or roads from gaining sufficient volume or head to cause erosion and water sedimentation.

As a general guide, culverts, dips and water turnouts should be space as follows:

ROAD GRADE	<u>SPACING</u>
Percent	feet
1-2	1,000
3-5	800-500
6-10	400-200
11-15	180-130
16-20	125-120

f. Cross drainage culverts should be sufficiently sized and properly installed in order to allow for drainage of storm or spring water runoff.

15.05 Maintenance and Abandonment (Refer to Handbook, Section 6)

- 1. Measures should be undertaken to maintain water diversion structures so as to control water runoff and avoid sedimentation of water.
- 2. Ditches, culverts and other water control installations should be inspected, cleaned out and maintained on a regular basis in order to remove debris and to assure normal functioning at all times.

3. Maintenance of water control installations should continue until the road is discontinued and put to bed by pulling of culverts, installation of water bars or other measures which are effective in stabilizing the area.

Where utilized, water bars should:

a. be constructed and maintained across the road at intervals which are sufficient to effectively control water runoff.

The following table should be used as a general guide in determining appropriate spacing of water bars:

Road	Distance Between
<u>Grade</u>	Water Bars
Percent	feet
1-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-45
21+	40

- b. be constructed at approximately 30 degrees downslope from the line perpendicular to the center line of the road;
- c. be constructed so as to effectively prevent surface water from flowing over or under the water bar; and
- d. extend sufficient distance beyond the traveled way so that water does not reenter the road surface.

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